

WO 99/25661

PCT/EP98/07209

12

CLAIMS :

1. A solar control panel comprising a glazing substrate and a solar control coating in which the solar control panel exhibits a luminous transmittance of less than 70%, a direct energy transmittance of less than 40% and a dominant wavelength in reflection of less than 510nm and in which the solar control coating comprises in sequence from the glazing panel at least:
- a first antireflective layer adjacent;
 - a first infra-red reflecting layer;
 - a first barrier layer;
 - a second antireflective layer;
 - a second infra-red reflecting layer;
 - a second barrier layer; and
 - a third antireflective layer;
- characterised in that the solar control coating comprises at least one additional light absorbing layer spaced from each of the barrier layers .
2. A solar control panel in accordance with Claim 1, in which the solar control panel exhibits a luminous transmittance of less than 67% and a direct energy transmittance of less than 39%.
3. A solar control panel in accordance with Claim 1, in which the solar control panel exhibits a luminous transmittance of less than 64% and a direct energy transmittance of less than 37%.
4. A solar control panel in accordance with Claim 1, in which the solar control panel exhibits a luminous transmittance of less than 58% and a direct energy transmittance of less than 34%.
5. A solar control panel in accordance with any preceding claim, in which the additional light absorbing layer comprises titanium in metallic form.
6. A solar control panel in accordance with any preceding claim, in which the additional light absorbing layer has a geometrical thickness of at least 5Å.
7. A solar control panel in accordance with any preceding claim, in which the additional light absorbing layer is positioned in the solar control coating such that it directly underlies one of the infra-red reflecting layers.
8. A solar control panel in accordance with Claim 7, in which the additional light absorbing layer is positioned in the solar control coating such that it underlies the second infra-red reflecting layer.

WO 99/25661

PCT/EP98/07209

13

9. A solar control panel in accordance with Claim 7, in which the additional light absorbing layer is positioned in the solar control coating such that it underlies the first infra-red reflecting layer.

10. A solar control panel in accordance with any preceding claim, in which the additional light absorbing layer is responsible for a reduction in the luminous transmittance of the panel of at least 4% and a reduction in the direct energy transmittance of the panel of at least 3%.

11. A solar control panel in accordance with any preceding claim, in which the solar control coating has no more than two spaced infra-red reflecting layers.

12. A solar control panel in accordance with any preceding claim, in which each of the antireflective layers comprises at least one layer of a metal oxide.

13. A multiple glazing unit comprising a solar control panel in accordance with any preceding claim associated with at least one additional glazing panel.

14. A laminated glazing unit comprising a solar control panel in accordance with any one of claims 1 to 12 associated with at least one additional glazing panel.

15. A glazing unit in accordance with Claim 13 or Claim 14, in which the glazing unit exhibits a luminous transmittance of less than 62% and a solar factor of less than 32%.

16. A glazing unit in accordance with Claim 13 or Claim 14, in which the glazing unit exhibits a luminous transmittance of less than 58% and a solar factor of less than 30%.

17. A glazing unit in accordance with Claim 13 or Claim 14, in which the glazing unit exhibits a luminous transmittance of less than 53% and a solar factor of less than 28%.

18. A method of manufacturing a solar control panel that exhibits a luminous transmittance of less than 70%, a direct energy transmittance of less than 40% and a dominant wavelength in reflection of less than 510nm comprising providing a solar control coating on a glazing substrate in which the solar control coating comprises in sequence at least the following layers:

- a first antireflective layer;
- a first infra-red reflecting layer;
- a first barrier layer;
- a second antireflective layer;